

### **REMARKS**

The Examiner is thanked for the thorough examination of the application. No new matter is believed to be added to the application by this Amendment.

### **Entry Of Amendment**

Entry of this Amendment under 37 C.F.R. § 1.116 is respectfully requested because it cancels claims and places the application in condition for allowance. Alternately, entry is requested as placing the application in better form for appeal.

### **Status Of The Claims**

Upon entry of this amendment, claims 1, 4, 6 and 9 are pending in the application. Claims 2, 3, 5 and 11-13 have been canceled. Claims 7, 8, 10 and 14-16 are canceled by this Amendment. Support for the amendments to claim 1 can be found in Table 1 of the specification. Support for the amendments to claim 6 can be found in the canceled claims and in Table 1 of the specification.

### **Rejection Under 35 U.S.C. § 102(b) Over Cornell**

Claims 6-8, 10, 14 and 15 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Cornell (U.S. Patent 4,233,288). Applicants traverse.

At page 2 of the Office Action, the Examiner has withdrawn the rejection of claim 1 of the invention over Cornell. However, instantly amended claim 6 incorporates subject matter

JMS/REG/af

from claim 1 that clearly renders claim 6 patentable over Cornell. Claim 9 depends upon claim 6 and is patentable for at least the above reason.

This rejection is overcome and withdrawal thereof is respectfully requested.

**Rejection Under 35 U.S.C. § 102(b) Over Morrow**

Claims 6-10 and 14-16 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Morrow (U.S. Patent 4,537,689). Applicants traverse.

At page 3 of the Office Action, the Examiner has withdrawn the rejection of claim 1 of the invention over Morrow. However, instantly amended claim 6 incorporates subject matter from claim 1 that clearly renders claim 6 patentable over Morrow. Claim 9 depends upon claim 6 and is patentable for at least the above reason.

This rejection is overcome and withdrawal thereof is respectfully requested.

**Rejection Under 35 U.S.C. § 102(b) Over Turgeon**

Claims 6 and 8 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Turgeon (U.S. Patent 5,541,165). Applicants traverse.

At page 4 of the Office Action, the Examiner has withdrawn the rejection of claim 1 of the invention over Turgeon. However, instantly amended claim 6 incorporates subject matter

from claim 1 that clearly renders claim 6 patentable over Turgeon. Claim 9 depends upon claim 6 and is patentable for at least the above reason.

This rejection is overcome and withdrawal thereof is respectfully requested.

**Rejection Under 35 U.S.C. § 102(b) Over Hunter**

Claims 6, 8, 10, and 15 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Hunter (U.S. Patent 6,159,459). Applicants traverse.

At pages 4 and 5 of the Office Action, the Examiner has withdrawn the rejection of claim 1 of the invention over Hunter. However, instantly amended claim 6 incorporates subject matter from claim 1 that clearly renders claim 6 patentable over Hunter. Claim 9 depends upon claim 6 and is patentable for at least the above reason.

This rejection is overcome and withdrawal thereof is respectfully requested.

**Rejection Under 35 U.S.C. § 103(a) Over Heyd**

Claims 1, 4, 6-10 and 14-16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Heyd (U.S. Patent 4,315,779). Applicants traverse.

The present invention pertains to a mouth wetting agent. Of the many embodiments of the invention, claim 1 is directed to a combination of elements wherein 100 parts by weight of water-soluble polymer (selected from methyl cellulose, carboxymethyl cellulose, sodium

carboxymethyl cellulose or hydroxyl ethyl cellulose), and 50-200 parts by weight of polyvalent alcohol (selected from glycerin, propylene glycol or sorbitol) are provided, wherein the amount and ratio of water-soluble polymer in the polymer composition is in the range of greater than 10% to 15 % by weight, and the amount and ratio of polyvalent alcohol in the polymer composition is in the range of 4-30 % by weight.

Due to the characteristics of the present invention, suitable flexibility of the polymer composition (as a mouth wetting agent) can be attained. The results for the present invention can be found in the specification in Table 1 at page 12 of the specification.

Heyd pertains to non-adhesive gel compositions for stabilizing dentures. Heyd fails to disclose any compositions wherein the weight ratio of polyvalent alcohol to water-soluble polymer is in the range of the present invention, i.e., 50-200/100. In the compositions in the tables in column 4 in Heyd, which are the only compositions where the weight ratios are written, the ratios of glycerin to sodium carboxymethyl cellulose significantly exceed the upper limit of the range of present invention (i.e., 200 parts by weight/100 parts by weight).

Also, Heyd discusses compounding using a ratio of water-soluble polymer from 1 to 10% (*see* column 2, lines 4-5). In contrast, the present invention uses greater than 10% to 15% of water-soluble polymer, which range Heyd neither teaches nor suggests. Further, Heyd at column 2, lines 67-68 teaches preferred ranges of 1 to 5% and 2 to 3%. By this, Heyd teaches that lower ranges are preferred and thus teaches away from the greater than 10% to 15% of water-soluble polymer set forth in claims 1 and 6 of the present invention.

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). A *prima facie* case of obviousness may also be rebutted by showing that the art, in any material respect, teaches away from the invention. *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997).

Further, the Examiner admits to some of the failures of Heyd at page 7, lines 10-12 of the Office Action: "The reference differs from the instant claims insofar as it does not include specific examples wherein the water-soluble polymer is 100 parts by weight and the polyvalent alcohol is 50 to 200 parts by weight." The Examiner then asserts that these are merely result-effective variables.

However, the Examiner fails to point out where in the single reference of Hyde itself lies the teaching or suggestion to obtain this weight relationship.

To establish a *prima facie* case of obviousness, "the prior art reference (or references when combined) must teach or suggest all the claim limitations." *MPEP* § 2143. In addition, if a reference needs to be modified to achieve the claimed invention "there must be a showing of a suggestion or motivation to modify the teachings of that reference to the claimed invention in order to support the obviousness conclusion." *Sibia Neurosciences Inc. v. Cadus Pharmaceutical Corp.*, 225 F.3d 1349, 55 USPQ2d 1927 (Fed. Cir. 2000).

In this case, the Examiner has failed to point out where in the single reference of Heyd itself the teaching or suggestion lies to obtain the weight relationship of water-soluble polymer to polyvalent alcohol.

As a result, one of ordinary skill in the art would not be motivated by Heyd to produce claims 1 and 6 of the present invention. A *prima facie* case of obviousness has thus not been made. Claims depending upon claims 1 or 6 are patentable for at least the above reasons.

Further, the polymer compositions in Heyd are not for utilization as a mouth wetting agent, but for improving the fit and adaptation of dentures to the oral cavity. Since the requirements of these are different, Heyd fails to set forth a suitable range of the ratio of polyvalent alcohol to water-soluble polymer for mouth wetting agent. Therefore, the present invention fails to be rendered unpatentable over Heyd for these additional reasons.

Yet further, the invention produces unexpected results that would fully rebut any obviousness that can be alleged over Heyd. These results are typified in Table 1 at page 12 of the specification. Examples 1 and 2 in Table 2 are comparable to the present invention and have the following characteristics: 1) weight ratio of polyvalent alcohol to water-soluble polymer in a range of 50-200/100, 2) compounding ratio of water-soluble polymer in a range of about 10-15% based on total wetting agent, and 3) compounding ratio of polyvalent alcohol in a range of 4-30% based on total wetting agent. In comparison, Example 3 in Table 1 of the specification fails to have the characteristics 1 and 2. That is, Example 3 in Table 1 has a compounding ratio of water-soluble polymer of 3%, which corresponds to the range of Heyd.

In the results in Table 1, Example 1 has a wetting feel in the oral cavity that lasts for several hours, and Example 2 has a wetting feel in the oral cavity that lasts for 10 hours or more. In comparison, Example 3 in Table 1 (which can be compared to Heyd) has a wetting feel in the oral cavity that only lasts for 1 hour or more. As a result, the advantages of the invention are clear.

This rejection is overcome and withdrawal thereof is respectfully requested.

#### **Information Disclosure Statement**

The Examiner is thanked for considering the Information Disclosure Statement filed January 25, 2005 and for making the initialed PTO-449 form of record in the application in the Office Action mailed March 1, 2006.

#### **Conclusion**

The Examiner's rejections have been overcome, obviated or rendered moot. No issues remain. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert E. Goozner, Ph.D. (Reg. No. 42,593) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Application No. 10/522,248  
Amendment dated November 22, 2006  
Reply to Office Action of August 23, 2006

Docket No.: 4578-0113PUS1  
Page 11 of 11

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.14; particularly, extension of time fees.

Dated: November 22, 2006

Respectfully submitted,

nc for By Robert E. Cooper #42,593  
James M. Slattery  
Registration No.: 28,380  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road  
Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant

JMS/REG/af